

WCS construction requirements alone may not be effective to ensure the provision of service to rural areas.

59. We also note that build-out requirements can be harmful because they might result in one of several forms of uneconomic construction: construction in geographic areas different than those that would be served in a competitive environment; deployment at a different rate than would occur in a competitive environment; or deployment of technology and equipment differing from that which competition would dictate. Further, strict build-out requirements might have the unintended consequence of causing firms to build first in urban areas where the mandatory benchmarks could be met most cheaply, and thus slow the development of service to rural areas. It may be difficult to devise construction requirements that avoid these negative effects.

60. We believe we may be able to appropriately address the statutory concerns of preventing warehousing of spectrum and promoting rapid deployment of new technologies and services in other ways. First, the concern regarding warehousing may be addressed by awarding licenses through auctions. Auctioning itself provides economic incentives for licensees to utilize spectrum efficiently and to provide service rapidly. Second, the goal of promoting service to rural areas can be furthered by our proposal to allow partitioning and disaggregation. And, of course, the broad universal service policies of the Telecommunications Act of 1996 will contribute substantially to addressing this objective as well.

61. Commenters should address whether the auction and service rules that we are proposing here, together with our overall competition and universal service policies, constitute effective safeguards and performance requirements for WCS licensing, or whether specific construction requirements are also needed. If we decide not to impose construction requirements, we would reserve the right to review this policy in the future if we receive complaints related to Section 309(j)(4)(B), or if our own monitoring initiatives or investigations indicate that a reassessment is warranted. Thus, we propose to further reserve the right to impose construction requirements on a WCS license or licenses in the future if evidence of actual competitive or rural service problems arises and if construction requirements can effectively ameliorate those problems. We seek comment on these proposals and tentative conclusions.

5. Treatment of Designated Entities

62. Section 309(j) of the Communications Act provides that, when promulgating competitive bidding regulations, the Commission must "ensure that small businesses, rural telephone companies, and businesses owned by members of minority groups and women [commonly referred to as 'designated entities'] are given the opportunity to participate in the provision of spectrum-based services."⁶⁸ As noted above, our allocation proposal contemplates that a WCS licensee will have broad flexibility in determining the range of services it will offer, and that licenses will be issued for broad geographic areas. Commenters should address the

⁶⁸ 47 U.S.C. § 309(j)(4)(D). See also 47 U.S.C. §§ 309(j)(3)(B) and (j)(4)(A).

extent to which potentially high capital costs for constructing WCS systems affect the advisability of adopting specific provisions applicable to the WCS auction. We note that our proposed partitioning and disaggregation rules for WCS licensing may provide designated entities with additional opportunities to participate in the provision of WCS service.

63. The Appropriations Act requires that the Commission conduct the auction in a manner that ensures that all proceeds of the bidding are deposited in the Treasury no later than September 30, 1997.⁶⁹ Because of the expedited procedures imposed by the Appropriations Act, an entity acquiring a WCS authorization must be prepared to make payment on its full bid amount quickly. Thus, we tentatively conclude that installment payment plans would be an inappropriate mechanism for encouraging designated entity participation in the WCS auction. We invite comment on this tentative conclusion and on how the Congressional intent concerning designated entities can be effectuated in connection with competitive bidding for WCS licenses. For example, would bidding credits be appropriate in this service? If so, should they be limited to small businesses or provided to all designated entities? In addition, to the extent commenters suggest special provisions for small businesses, we also seek comment on the appropriate definition for small business. Additionally, should any special provisions be afforded to rural telephone companies? To the extent that commenters propose specific provisions to ensure the participation of minority and women-owned businesses, we also invite them to address how such provisions should be crafted to meet the relevant standards of judicial review (strict scrutiny for minorities and intermediate scrutiny for women).⁷⁰

H. Other Administrative Matters

64. We propose to update the entries for the 2300-2450 MHz band in the international table (columns 1 through 3 of the Table of Frequency Allocations ("Table"), 47 C.F.R. § 2.106) in accordance with the *Final Acts of the 1995 World Radiocommunication Conference*.⁷¹ Specifically, the following international footnotes would be re-numbered using the new "S"

⁶⁹ Appropriations Act, Section 3001(d).

⁷⁰ See, for relevant standards of review, *Adarand Constructors v. Peña*, 115 S.Ct. 2097 (1995) ("[Racial] classifications are constitutional only if they are narrowly tailored measures that further compelling governmental interests"), and *United States v. Virginia*, 116 S.Ct. 2264 (June 26, 1996) ("Parties who seek to defend gender-based governmental action must demonstrate an 'exceedingly persuasive justification' for that action").

⁷¹ See ITU *Final Acts of the World Radiocommunication Conference (WRC-95)*, Geneva, 1995. We are updating the entire band from 2300 to 2450 MHz in accordance with an agreement that the Commission's staff has made with the Federal Register. Specifically, the Federal Register staff requests that we display all frequency bands in the Table of Frequency Allocations between unbroken horizontal lines. This assist the Federal Register staff in their maintenance of the Table of Frequency Allocations in the Code of Federal Regulations. The International Table is provided for informational purposes only.

numbering scheme: 664 (S5.282), 750B (S5.393), 751 (S5.394),⁷² 751A (S5.395), 751B (S5.396), and 752 (S5.150).⁷³

65. We also propose to update the entries for the 2300-2310, 2400-2402, and 2417-2450 MHz bands in the Government radio service allocations' column (column 4 of the Table) in accordance with the newly revised *NTIA Manual*.⁷⁴ Specifically, all existing Government allocations and footnote references would be deleted from the 2300-2310 and 2400-2402 MHz bands⁷⁵ and reference to footnote G123 would be added to both bands. Footnote G123, which permits Government operations in 2300-2310 and 2400-2402 MHz bands to continue only on a non-interference basis to authorized non-Government operations and requires that Government operations not hinder the implementation of any non-Government operation, would also be added to the list of Government footnotes. With regard to the 2417-2450 MHz band, the primary Government radiolocation service allocation would be downgraded to a secondary service and reference to footnote G124 would be added. Footnote G124, which states that the 2417-2450 MHz band has been reallocated to shared Government/non-Government use, would also be added to the list of Government footnotes.

66. We also propose to update the entries for the 2305-2320 and 2345-2360 MHz bands in the non-Government radio service allocations' column (column 5 of the Table) in accordance with our proposals herein. Specifically, we propose to add the fixed, mobile, and radiolocation services on a primary basis to the 2305-2320 and 2345-2360 MHz bands, to delete the reference

⁷² In addition to being re-numbered, the text of footnote 751 was modified. Specifically, aeronautical telemetry in the United States now has priority over other mobile service uses in the 2300-2390 MHz band (that is, the 2300-2310 MHz band has been added to the existing restriction). (At the next competent conference, we intend to have the aeronautical telemetry restriction removed from the 2300-2320 and 2345-2360 MHz bands in the United States.) In addition, aeronautical telemetry in Canada now has priority over other mobile service uses in the 2300-2483.5 MHz band (this is an entirely new restriction in Canada). Finally, Australia and Papua New Guinea have removed the aeronautical telemetry priority use restriction from the 2310-2390 MHz band.

⁷³ Footnote 752 was one of seven international footnotes that separately designated certain bands for industrial, scientific and medical applications. These international footnotes (534, 546, 548, 707, 752, 806, and 881) were combined into a single international footnote, S5.150.

⁷⁴ The 2300-2310 and 2400-2402 MHz bands were recently reallocated for exclusive non-Government use and the 2417-2450 MHz band was reallocated for shared Government/non-Government use. See Government footnotes G123 and G124. See also *NTIA's Manual of Regulations & Procedures for Federal Radio Frequency Management*, September 1995 Edition, Revisions for January and May 1996 at pages 4-63 and 4-64. Government radio service allocations are provided for informational purposes only.

⁷⁵ The primary Government radiolocation and secondary Government fixed and mobile service allocations and reference to footnotes US253 and G2 would be deleted from the 2300-2310 MHz band. The primary Government radiolocation service allocation and reference to footnote G2 would be deleted from the 2400-2402 band. The text of footnote G2 would also be updated to remove the 2300-2310 and 2400-2402 MHz bands from the list of Government radiolocation service allocations that are limited to the military services.

to footnote US253 from the 2300-2310 MHz band,⁷⁶ to add a reference to footnote USxxx to the 2305-2310 MHz band, and to add a reference to footnote USyyy in the 2310-2320 and 2345-2360 MHz bands.⁷⁷ Proposed United States footnote USxxx, which prohibits airborne and space-to-Earth transmissions in the 2305-2310 MHz band and which also requires that WCS operations in the 2305-2310 MHz band within 50 kilometers of the Deep Space receive site located on Fort Irwin, California be coordinated, and proposed United States footnote USyyy, which provides for continued secondary aeronautical telemetry use of the 2310-2320 and 2345-2360 MHz bands, would be added to the list of United States footnotes. In addition, we propose to update the entries for the 2305-2320 and 2345-2360 MHz bands in the rule part cross reference column (column 6 of the Table) to add a reference to the Wireless Communications Service.

IV. PROCEDURAL MATTERS

67. Ex Parte Presentation. This is a non-restricted notice and comment rule making proceeding. *Ex parte* presentations are permitted, provided they are disclosed as provided in Commission rules. *See generally* 47 C.F.R. Sections 1.1202, 1.1203, and 1.1206(a).

68. Authority. This action is taken pursuant to Sections 4(i), 7(a), 303(c), 303(f), 303(g), and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. Sections 154(i), 157(a), 303(c), 303(f), 303(g), and 303(r) and the Omnibus Consolidated Appropriations Act, 1997, P.L. 104-208, 110 Stat. 3009 (1996).

69. Comment. Pursuant to applicable procedures set forth in Sections 1.415 and 1.419 of the Commission's Rules, interested parties may file comments on or before **December 4, 1996**, and reply comments on or before **December 16, 1996**. All relevant and timely comments will be considered by the Commission before final action is taken in this proceeding. To file formally in this proceeding, participants must file an original and five copies of all comments, reply comments, and supporting comments. If participants want each Commissioner to receive a personal copy of their comments, an original plus ten comments must be filed. Comments and reply comments should be sent to Office of the Secretary, Federal Communications Commission, Washington, DC 20554. Comments and reply comments will be available for public inspection

⁷⁶ The 2300-2310 MHz band was recently reallocated for exclusive non-Government use. Government operations may continue in the 2300-2310 MHz band only on a non-interference basis to authorized non-Government operations. *See* Appendix for Government footnote G123. Thus, the current requirements contained in footnote US253 are repetitive and unneeded. (In addition, the text of footnote US253 would be deleted from the list of United States footnotes.)

⁷⁷ Specifically, the requirements currently listed in footnote US276 are proposed to be split into two footnotes, revised footnote US276 and new footnote USyyy. This proposal is made in order to clarify that continued aeronautical telemetering and associated telecommand operations in the 2310-2320 and 2345-2360 MHz bands are on a secondary basis to WCS operations. The operating restrictions in the 2320-2345 and 2360-2390 MHz bands are unchanged and are contained in revised footnote US276.

during regular business hours in the FCC Reference Center (Room 239) of the Federal Communications Commission, 1919 M Street, N.W., Washington, DC 20554.

70. Additional Information. For further information concerning this rule making proceeding contact Tom Mooring at (202) 418-2450, internet: tmooring@fcc.gov, Office of Engineering and Technology, or Matthew Moses or Joshua Roland at (202) 418-0660, Wireless Telecommunications Bureau, Federal Communications Commission, Washington, DC 20554.

FEDERAL COMMUNICATIONS COMMISSION


William F. Caton
Acting Secretary

Appendix: Proposed Rules

Parts 1, 2, 27, and 97 of title 47 of the Code of Federal Regulations are proposed to be amended as follows:

PART 1 -- PRACTICE AND PROCEDURE

1. The authority citation for part 1 continues to read as follows:

AUTHORITY: 47 U.S.C. 151, 154, 303, and 309(j) unless otherwise noted.

2. Paragraph (b)(1) and the first sentence of paragraph (b)(2) of section 1.1307 and the entries for the Wireless Communications Service in the Table are revised to read as follows:

§ 1.1307 Actions which may have a significant environmental effect, for which Environmental Assessments (EAs) must be prepared.

* * * * *

(b) * * *

(1) The exposure limits in section 1.1310 are generally applicable to all facilities, operations and transmitters regulated by the Commission. However, a determination of compliance with the exposure limits in section 1.1310 (routine environmental evaluation), and preparation of an EA if the limits are exceeded, is necessary only for facilities, operations and transmitters that fall into the categories listed in Table 1, or those specified in paragraph (b)(2) of this section. All other facilities, operations and transmitters are categorically excluded from making such studies or preparing an EA, except as indicated in paragraphs (c) and (d) of this section. For purposes of Table 1, "rooftop" means the roof or otherwise outside, topmost level or levels of a building structure that is occupied as a workplace or residence and where either workers or the general public may have access. The term "power" in column 2 of Table 1 refers to total operating power of the transmitting operation in question in terms of effective radiated power (ERP), equivalent isotropically radiated power (EIRP), or peak envelope power (PEP), as defined in section 2.1 of this chapter. For the case of the Cellular Radiotelephone Service, subpart H of part 22 of this chapter; the Personal Communications Service, part 24 of this chapter, the Wireless Communications Service, part 27 of this chapter and covered Specialized Mobile Radio Service operations, part 90 of this chapter, the phrase "total power of all channels" in column 2 of Table 1 means the sum of the ERP or EIRP of all co-located simultaneously operating transmitters of the facility. When applying the criteria of Table 1, radiation in all directions should be considered. For the case of transmitting facilities using sectorized transmitting antennas, applicants and licensees should apply the criteria to all transmitting channels in a given sector, noting that for a highly directional antenna there is relatively little contribution to ERP or EIRP summation for other directions.

TABLE 1: TRANSMITTERS, FACILITIES AND OPERATIONS SUBJECT TO ROUTINE ENVIRONMENTAL EVALUATION

SERVICE (TITLE 47 CFR RULE PART)	EVALUATION REQUIRED IF:
*	*
Wireless Communications Service (for those services with similar or identical operating characteristics or functions to the Digital Audio Radio Service) (part 27)	all included
Wireless Communications Service (for those services with similar or identical operating characteristics or functions to the Multipoint Distribution Service, Cellular Radiotelephone Service, Personal Communications Service, Paging or Radiotelephone Service, or Paging Operations or "covered" Specialized Mobile Radio Services within the Private Land Mobile Radio Services) (part 27)	total power of all channels > 2000 W ERP (3280 W EIRP)
*	*

* Note: * * *

(2) Mobile and portable transmitting devices that operate in the Cellular Radiotelephone Service, the Personal Communications Services (PCS), the Wireless Communications Service, the Satellite Communications Services, the Maritime Services (ship earth stations only) covered Specialized Mobile Radio Service, providers authorized under subpart H of part 22, part 24, part 25, part 27, part 80, and part 90 of this chapter are subject to routine environmental evaluation for RF exposure prior to equipment authorization or use, as specified in sections 2.1091 and 2.1093 of this chapter. * * *

* * * * *

3. New paragraph (a)(9) is added to section 1.2102 to read as follows:

§ 1.2102 Eligibility of applications for competitive bidding.

(a) * * *

- (9) Wireless Communications Service (WCS) (see part 27 of this chapter).

* * * * *

**PART 2 -- FREQUENCY ALLOCATIONS AND RADIO TREATY MATTERS;
GENERAL RULES AND REGULATIONS**

1. The authority citation for part 2 continues to read as follows:

AUTHORITY: Section 4, 302, 303, and 307 of the Communications Act of 1934, as amended, 47 U.S.C. sections 154, 302, 303 and 307, unless otherwise noted.

2. Section 2.106, the Table of Frequency Allocations, is amended as follows:

- a. Remove the existing entries for 2300-2450 MHz.
- b. Add entries in numerical order for 2300-2450 MHz.
- c. In the International Footnotes under heading I., add footnotes S5.150, S5.282, S5.393, S5.394, S5.395, and S5.396.
- d. In the International Footnotes under heading II., remove footnotes 750B, 751, 751A, and 751B.
- e. Remove United States footnote US253.
- f. Add United States footnotes USxxx and USyyy.
- g. Revise United States footnotes US276 and US328.
- h. Add Government footnotes G120, G123 and G124.
- i. Revise Government footnote G2.

The revisions, deletions, and additions read as follows:

§ 2.106 Table of Frequency Allocations

* * * * *

International table			United States table		FCC use designators	
Region 1 – allocation MHz	Region 2 – allocation MHz	Region 3 – allocation MHz	Government	Non-Government	Rule part(s)	Special-use frequencies
(1)	(2)	(3)	Allocation MHz (4)	Allocation MHz (5)	(6)	(7)
*	*	*	*	*	*	*
2300 – 2305 FIXED MOBILE Amateur Radiolocation	2300 – 2305 FIXED MOBILE RADIOLOCATION Amateur S5.394	2300 – 2305 FIXED MOBILE RADIOLOCATION Amateur	2300 – 2305 G123	2300 – 2305 Amateur	Amateur (97)	
2305 – 2310 FIXED MOBILE Amateur Radiolocation	2305 – 2310 FIXED MOBILE RADIOLOCATION Amateur S5.394	2305 – 2310 FIXED MOBILE RADIOLOCATION Amateur	2305 – 2310 USxxx G123	2305 – 2310 FIXED MOBILE RADIOLOCATION Amateur USxxx	WIRELESS COMMUNICATIONS (27) Amateur (97)	
2310 – 2320 FIXED MOBILE Amateur Radiolocation S5.395	2310 – 2320 FIXED MOBILE RADIOLOCATION Amateur S5.393 S5.394 S5.396	2310 – 2320 FIXED MOBILE RADIOLOCATION Amateur S5.393 S5.396	2310 – 2320 Fixed Mobile USyyy Radiolocation G2 S5.396 US327 US328 G120	2310 – 2320 BROADCASTING- SATELLITE US327 FIXED MOBILE USyyy RADIOLOCATION S5.396 US328	WIRELESS COMMUNICATIONS (27)	Digital Audio Radio Services
2320 – 2345 FIXED MOBILE Amateur Radiolocation S5.395	2320 – 2345 FIXED MOBILE RADIOLOCATION Amateur S5.393 S5.394 S5.396	2320 – 2345 FIXED MOBILE RADIOLOCATION Amateur S5.393 S5.396	2320 – 2345 Fixed Mobile US276 Radiolocation G2 S5.396 US327 US328 G120	2320 – 2345 BROADCASTING- SATELLITE US327 Mobile US276 S5.396 US328		Digital Audio Radio Services
2345– 2360 FIXED MOBILE Amateur Radiolocation S5.395	2345 – 2360 FIXED MOBILE RADIOLOCATION Amateur S5.393 S5.394 S5.396	2345 – 2360 FIXED MOBILE RADIOLOCATION Amateur S5.393 S5.396	2345 – 2360 Fixed Mobile USyyy Radiolocation G2 S5.396 US327 US328 G120	2345 – 2360 BROADCASTING- SATELLITE US327 FIXED MOBILE USyyy RADIOLOCATION S5.396 US328	WIRELESS COMMUNICATIONS (27)	Digital Audio Radio Services

International table			United States table		FCC use designators	
Region 1 – allocation MHz	Region 2 – allocation MHz	Region 3 – allocation MHz	Government	Non-Government	Rule part(s)	Special-use frequencies
(1)	(2)	(3)	Allocation MHz (4)	Allocation MHz (5)	(6)	(7)
2360 – 2390 FIXED MOBILE Amateur Radiolocation	2360 – 2390 FIXED MOBILE RADIOLOCATION Amateur \$5.394	2360 – 2390 FIXED MOBILE RADIOLOCATION Amateur	2360 – 2390 MOBILE US276 RADIOLOCATION G2 Fixed G120	2360 – 2390 MOBILE US276		
2390 – 2400 FIXED MOBILE Amateur Radiolocation	2390 – 2400 FIXED MOBILE RADIOLOCATION Amateur \$5.394	2390 – 2400 FIXED MOBILE RADIOLOCATION Amateur	2390 – 2400 G122	2390 – 2400 AMATEUR	AMATEUR (97) Radio Frequency Devices (15)	
2400 – 2402 FIXED MOBILE Amateur Radiolocation \$5.150 \$5.282	2400 – 2402 FIXED MOBILE RADIOLOCATION Amateur \$5.150 \$5.282 \$5.394	2400 – 2402 FIXED MOBILE RADIOLOCATION Amateur \$5.150 \$5.282	2400 – 2402 \$5.150 G123	2400 – 2402 Amateur \$5.150 \$5.282	Amateur (97)	
2402 – 2417 FIXED MOBILE Amateur Radiolocation \$5.150 \$5.282	2402 – 2417 FIXED MOBILE RADIOLOCATION Amateur \$5.150 \$5.282 \$5.394	2402 – 2417 FIXED MOBILE RADIOLOCATION Amateur \$5.150 \$5.282	2402 – 2417 \$5.150 G122	2402 – 2417 AMATEUR \$5.150 \$5.282	AMATEUR (97) Radio Frequency Devices (15)	
2417 – 2450 FIXED MOBILE Amateur Radiolocation \$5.150 \$5.282	2417 – 2450 FIXED MOBILE RADIOLOCATION Amateur \$5.150 \$5.282 \$5.394	2417 – 2450 FIXED MOBILE RADIOLOCATION Amateur \$5.150 \$5.282	2417 – 2450 Radiolocation G2 \$5.150 \$5.282 G124	2417 – 2450 Amateur \$5.150 \$5.282	Amateur (97)	
.

INTERNATIONAL FOOTNOTES

* * * * *

I. "S" Numbering Scheme

* * * * *

S5.150 The following bands:

13533-13567 kHz (centre frequency 13560 kHz),
26957-27283 kHz (centre frequency 27120 kHz),
40.66-40.70 MHz (centre frequency 40.68 MHz),
902-928 MHz in Region 2 (centre frequency 915 MHz),
2400-2500 MHz (centre frequency 2450 MHz),
5725-5875 MHz (centre frequency 5800 MHz), and
24-24.25 GHz (centre frequency 24.125 GHz)

are also designated for industrial, scientific and medical (ISM) applications. Radiocommunication services operating within these bands must accept harmful interference which may be caused by these applications. ISM equipment operating in these bands is subject to the provisions of No. 1815/S15.13.

* * * * *

S5.282 In the bands 435-438 MHz, 1260-1270 MHz, 2400-2450 MHz, 3400-3410 MHz (in Regions 2 and 3 only) and 5650-5670 MHz, the amateur-satellite service may operate subject to not causing harmful interference to other services operating in accordance with the Table (see No. S5.43). Administrations authorizing such use shall ensure that any harmful interference caused by emissions from a station in the amateur-satellite service is immediately eliminated in accordance with the provisions of No. 2741/S25.11. The use of the bands 1260-1270 MHz and 5650-5670 MHz by the amateur-satellite service is limited to the Earth-to-space direction.

* * * * *

S5.393 Additional allocation: in the United States and India, the band 2310-2360 MHz is also allocated to the broadcasting-satellite service (sound) and complementary terrestrial sound broadcasting service on a primary basis. Such use is limited to digital audio broadcasting and is subject to the provisions of Resolution 528 (WARC-92).

S5.394 In the United States, the use of the band 2300-2390 MHz by the aeronautical mobile service for telemetry has priority over other uses by the mobile services. In Canada, the use of the band 2300-2483.5 MHz by the aeronautical mobile service for telemetry has priority over other uses by the mobile services.

S5.395 In France, the use of the band 2310-2360 MHz by the aeronautical mobile service for telemetry has priority over other uses by the mobile service.

S5.396 Space stations of the broadcasting-satellite service in the band 2310-2360 MHz operating in accordance with No. S5.393 that may affect the services to which this band is allocated in other countries shall be coordinated and notified in accordance with Resolution 33. Complementary terrestrial broadcasting stations shall be subject to bilateral coordination with neighboring countries prior to their bringing into use.

* * * * *

UNITED STATES (US) FOOTNOTES

* * * * *

US276 Except as otherwise provided for herein, use of the bands 2320-2345 and 2360-2390 MHz by the mobile service is limited to aeronautical telemetering and associated telecommand operations for flight testing of manned or unmanned aircraft, missiles or major components thereof. The following four frequencies are shared on a co-equal basis for telemetering and associated telecommand operations of expendable and re-usable launch vehicles whether or not such operations involve flight testing: 2332.5, 2364.5, 2370.5, and 2382.5 MHz. All other mobile telemetering uses shall be secondary to the above uses.

* * * * *

US328 In the band 2320-2345 MHz, the mobile and radiolocation services are allocated on a primary basis until 1 January 1997 or until broadcasting-satellite (sound) service has been brought into use in such a manner as to affect or be affected by the mobile and radiolocation services in those service areas, whichever is later. The broadcasting-satellite (sound) service during implementation should also take cognizance of the expendable and reusable launch vehicle frequencies 2312.5, 2332.5, and 2352.5 MHz, to minimize the impact on this mobile service use to the extent possible.

* * * * *

USxxx In the 2305-2310 MHz band, airborne and space-to-Earth operations are prohibited. Additionally, in the 2305-2310 MHz band, Wireless Communications Service operations within 50 kilometers of 35° 20' North Latitude and 116° 53' West Longitude shall be coordinated on a case-by-case basis through the frequency assignment subcommittee in order to minimize harmful interference to NASA's Goldstone Deep Space facility.

USyyy The bands 2310-2320 and 2345-2360 MHz are also available for aeronautical telemetering and associated telecommand operations for flight testing of manned or unmanned aircraft, missiles or major components thereof on a secondary basis to the Wireless

Communications Service. The following two frequencies are shared on a co-equal basis for telemetering and associated telecommand operations of expendable and re-usable launch vehicles whether or not such operations involve flight testing: 2312.5 and 2352.5 MHz. Other mobile telemetering uses may be provided on a non-interference basis to the above uses.

* * * * *

GOVERNMENT FOOTNOTES

* * * * *

G2 In the bands 216-225, 420-450 (except as provided by US217), 890-902, 928-942, 1300-1400, 2310-2390, 2417-2450, 2700-2900, 5650-5925, and 9000-9200 MHz, the Government radiolocation is limited to the military services.

* * * * *

G120 Development of airborne primary radars in the band 2310-2390 MHz with peak transmitter power in excess of 250 watts for use in the United States is not permitted.

* * * * *

G123 The bands 2300-2310 and 2400-2402 MHz were identified for reallocation, effective August 10, 1995, for exclusive non-Government use under Title VI of the Omnibus Budget Reconciliation Act of 1993. Effective August 10, 1995, any Government operations in these bands are on a non-interference basis to authorized non-Government operations and shall not hinder the implementation of any non-Government operations.

G124 The band 2417-2450 MHz was identified for reallocation, effective August 10, 1995, for mixed Government and non-Government use under Title VI of the Omnibus Budget Reconciliation Act of 1993.

3. Section 2.1091 is amended by revising the first sentence in paragraph (c) to read as follows:

§2.1091 Radiofrequency radiation exposure evaluation: mobile and unlicensed devices.

* * * * *

(c) Mobile devices that operate in the Cellular Radiotelephone Service, the Personal Communications Services, the Wireless Communications Service, the Satellite Communications Services, the Maritime Services and the Specialized Mobile Radio Service authorized under subpart H of part 22 of this chapter, part 24 of this chapter, part 25 of this chapter, part 27 of this chapter (only mobile devices with similar or identical operating characteristics to those authorized under subpart H of part 22, part 24, and "covered" SMR under part 90), part 80 of

this chapter (ship earth station devices only) and part 90 of this chapter ("covered" SMR devices only, as defined in the note to Table 1 of section 1.1307(b)(1) of this chapter), are subject to routine environmental evaluation for RF exposure prior to equipment authorization or use if their effective radiated power (ERP) is 1.5 watts or more. * * *

* * * * *

4. Section 2.1093 is amended by revising the first sentence of paragraph (c) to read as follows:

§ 2.1093 Radiofrequency radiation exposure evaluation: portable devices.

* * * * *

(c) Portable devices that operate in the Cellular Radiotelephone Service, the Personal Communications Services, the Wireless Communications Service, the Satellite Communications services, the Maritime Services and the Specialized Mobile Radio Service authorized under subpart H of part 22 of this chapter, part 24 of this chapter, part 25 of this chapter, part 27 of this chapter (only portable devices with similar or identical operating characteristics to those authorized under subpart H of part 22, part 24, and "covered" SMR under part 90), part 80 of this chapter (ship earth station devices only), part 90 of this chapter ("covered" SMR devices only, as defined in the note to Table 1 of section 1.1307(b)(1) of this chapter), and portable unlicensed personal communication service and millimeter wave devices authorized under section 15.253, section 15.255 or subpart D of part 15 of this chapter are subject to routine environmental evaluation for RF exposure prior to equipment authorization or use. * * *

* * * * *

5. A new part 27 is added to read as follows:

PART 27 -- WIRELESS COMMUNICATIONS SERVICE

Subpart A -- General Information

Sec.

- 27.1 Basis and purpose.
- 27.2 Permissible communications.
- 27.3 Other applicable rule parts.
- 27.4 Terms and definitions.

Subpart B -- Applications and Licenses

- 27.11 Initial authorization.
- 27.12 Eligibility.
- 27.13 License period.

- 27.14 Criteria for comparative renewal proceedings.
- 27.15 Geographic partitioning and spectrum disaggregation.
- 27.16 Franchising

Subpart C -- Technical Standards

- 27.51 Equipment authorization.
- 27.52 RF safety.
- 27.53 Emission limits.
- 27.54 Frequency stability.
- 27.55 Field strength limits.
- 27.56 Antenna structures; air navigation safety.
- 27.57 International coordination.

Subpart D -- Competitive Bidding Procedures for WCS

- 27.201 WCS subject to competitive bidding.
- 27.202 Competitive bidding mechanisms.
- 27.203 Withdrawal, default and disqualification payments.
- 27.204 Bidding application and certification procedures
- 27.205 Submission of upfront payments.
- 27.206 Submission of down payment and filing of long-form applications.
- 27.207 Procedures for filing petitions to deny against long-form WCS applications.

Subpart E -- Application, Licensing, and Processing Rules for WCS

- 27.301 Authorization required.
- 27.302 Eligibility.
- 27.303 Formal and informal applications.
- 27.304 Filing of WCS applications, fees, and numbers of copies.
- 27.305 Standard application forms and permissive changes or minor modifications for the Wireless Communications Service.
- 27.306 Miscellaneous forms.
- 27.307 General application requirements.
- 27.308 Technical content of applications; maintenance of list of station locations.
- 27.310 Waiver of rules.
- 27.311 Defective applications.
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- 27.313 Amendment of applications for Wireless Communications Service (other than applications filed on FCC Form 175).
- 27.314 Application for temporary authorizations.
- 27.315 Receipt of application; applications in the Wireless Communications Service filed on FCC Form 175 and other applications in the WCS Service.
- 27.316 Public notice period.

- 27.317 Dismissal and return of applications.
- 27.318 Opposition to applications.
- 27.319 Ownership changes and agreements to amend or dismiss applications or pleadings.
- 27.320 Mutually exclusive applications.
- 27.321 Consideration of applications.
- 27.322 Post-auction divestitures.
- 27.323 Transfer of control or assignment of station authorization.
- 27.324 Termination of authorization.

AUTHORITY: 47 U.S.C. sections 154, 301, 302, 303, 307, 309 and 332, unless otherwise noted.

Subpart A -- General Information

§ 27.1 Basis and purpose.

This section contains the statutory basis for this part of the rules and provides the purpose for which this part is issued.

(a) Basis. The rules for the Wireless Communications Service (WCS) in this part are promulgated under the provisions of the Communications Act of 1934, as amended, that vest authority in the Federal Communications Commission to regulate radio transmission and to issue licenses for radio stations.

(b) Purpose. This part states the conditions under which the 2305-2320 MHz and 2345-2360 MHz bands are made available and licensed for the provision of WCS.

(c) Scope. The rules in this part apply only to stations authorized under this part.

§ 27.2 Permissible communications.

Subject to the rules contained herein, fixed, mobile and radiolocation services may be provided using the 2305-2320 and 2345-2360 MHz bands. In addition, satellite digital audio radio service (DARS) may be provided using the 2310-2320 and 2345-2360 MHz bands. Satellite DARS service shall be provided in manner consistent with part 25 of this chapter.

§ 27.3 Other applicable rule parts.

Other FCC rule parts applicable to the Wireless Communications Service include the following:

(a) Part 0. This part describes the Commission's organization and delegations of authority. Part 0 of this chapter also lists available Commission publications, standards and procedures for access to Commission records, and location of Commission Field Offices.

(b) Part 1. This part includes rules of practice and procedure for license applications, adjudicatory proceedings, procedures for reconsideration and review of the Commission's actions; provisions concerning violation notices and forfeiture proceedings; competitive bidding procedures, and the environmental requirements that, if applicable, must be complied with prior to the initiation of construction.

(c) Part 2. This part contains the Table of Frequency Allocations and special requirements in international regulations, recommendations, agreements, and treaties. This part also contains standards and procedures concerning the marketing and importation of radio frequency devices, and for obtaining equipment authorization.

(d) Part 5. This part contains rules prescribing the manner in which parts of the radio frequency spectrum may be made available for experimentation.

(e) Part 17. This part contains requirements for construction, marking and lighting of antenna towers.

(f) Part 25. This part contains the requirements for satellite communications, including the satellite DARS.

(g) Part 68. This part contains technical standards for connection of terminal equipment to the telephone network.

§ 27.4 Terms and definitions.

Assigned Frequency. The center of the frequency band assigned to a station.

Authorized Bandwidth. The maximum width of the band of frequencies permitted to be used by a station. This is normally considered to be the necessary or occupied bandwidth, whichever is greater.

Average Terrain. The average elevation of terrain between 3 and 16 kilometers from the antenna site.

Effective Radiated Power (e.r.p.) (in a given direction). The product of the power supplied to the antenna and its gain relative to a half-wave dipole in a given direction.

Equivalent Isotropically Radiated Power (e.i.r.p.). The product of the power supplied to the antenna and the antenna gain in a given direction relative to an isotropic antenna.

Fixed Service. A radio communication service between specified fixed points.

Fixed Station. A station in the fixed service.

Land Mobile Service. A mobile service between base stations and land mobile stations, or between land mobile stations.

Land Mobile Station. A mobile station in the land mobile service capable of surface movement within the geographic limits of a country or continent.

Land Station. A station in the mobile service not intended to be used while in motion.

Mobile Service. A radio communication service between mobile and land stations, or between mobile stations.

Mobile Station. A station in the mobile service intended to be used while in motion or during halts at unspecified points.

National Geodetic Reference System (NGRS). The name given to all geodetic control data contained in the National Geodetic Survey (NGS) data base. (Source: National Geodetic Survey, U.S. Department of Commerce)

Radiodetermination. The determination of the position, velocity and/or other characteristics of an object, or the obtaining of information relating to these parameters, by means of the propagation properties of radio waves.

Radiolocation. Radiodetermination used for purposes other than those of radionavigation.

Radionavigation. Radiodetermination used for the purpose of navigation, including obstruction warning.

Satellite Digital Audio Radio Service ("DARS"). A radiocommunication service in which compact disc quality programming is digitally transmitted by one or more space stations.

Wireless Communications Service. A radiocommunication service that encompasses fixed, mobile, satellite digital audio radio (satellite DARS), and radiolocation services.

Subpart B -- Applications and Licenses

§ 27.11 Initial authorization.

- (a) An applicant must file an application for an initial WCS authorization.

(b) The initial WCS authorizations shall be granted for XX megahertz of spectrum and shall be on a [geographical basis to be determined].

(c) The initial WCS authorizations shall be a blanket license. Applications for individual sites are not required and will not be accepted.

§ 27.12 Eligibility.

Any entity, other than those precluded by section 310 of the Communications Act of 1934, as amended, 47 U.S.C. section 310, is eligible to hold a license under this part.

§ 27.13 License period.

Licenses shall be granted for ten year terms from the date of original issuance or renewal.

§ 27.14 Criteria for comparative renewal proceedings.

(a) A renewal applicant involved in a comparative renewal proceeding shall receive a preference, commonly referred to as a renewal expectancy, which is the most important comparative factor to be considered in the proceeding, if its past record for the relevant license period demonstrates that the renewal applicant:

(1) Has provided "substantial" service during its past license term. In addition, the communications provided must be sound, favorable, and substantially above a level of mediocre service which might just minimally warrant renewal; and

(2) Has substantially complied with applicable Commission rules, policies and the Communications Act.

(b) At five and ten years from the date of original issuance or renewal, the licensee shall report to the Commission what it has built and the percentage of its service area population that it serves. The Commission shall take these reports into account during its consideration of the renewal application.

§ 27.15 Geographic partitioning and spectrum disaggregation.

(a) Geographic partitioning and spectrum disaggregation are permitted without restriction.

(b) In the event that the WCS license is partitioned or disaggregated, any partitionee/disaggregatee shall be authorized to hold its license for the remainder of the partitioner's/disaggregator's original ten-year license term.

§ 27.16 Franchising.

In the event that the WCS licensee franchises portions of its spectrum and geographic service area on a leased basis, the WCS licensee shall retain ultimate responsibility for meeting interference and other licensing requirements.

Subpart C -- Technical Standards**§ 27.51 Equipment authorization.**

(a) Each transmitter utilized for operation under this part and each transmitter marketed, as set forth in section 2.803 of this chapter, must be of a type that has been authorized by the Commission under its type acceptance procedure.

(b) The Commission periodically publishes a list of type accepted equipment, entitled "Radio Equipment List, Equipment Accepted for Licensing." Copies of this list are available for public reference at the Commission's offices in Washington, D.C., at each of its field offices, and may be ordered from its copy contractor.

(c) Any manufacturer of radio transmitting equipment to be used in these services may request equipment authorization following the procedures set forth in subpart J of part 2 of this chapter. Equipment authorization for an individual transmitter may be requested by an applicant for a station authorization by following the procedures set forth in part 2 of this chapter. Such equipment if approved or accepted will not normally be included in the Commission's Radio Equipment List but will be individually enumerated on the station authorization.

§ 27.52 RF safety.

Licensees and manufacturers are subject to the radio frequency radiation exposure requirements specified in sections 1.1307(b), 2.1091, and 2.1093 of this chapter, as appropriate. Applications for equipment authorization of mobile or portable devices operating under this section must contain a statement confirming compliance with these requirements for both fundamental emissions and unwanted emissions. Technical information showing the basis for this statement must be submitted to the Commission upon request.

§ 27.53 Emission limits.

(a) The peak power of any emission outside the licensee's bands of operation shall be attenuated below the maximum peak spectral power density (p) within the band of operation by the following amounts:

(1) For fixed operations: By a factor not less than $43 + 10 \log (p)$ dB on all frequencies between 2300 and 2305 MHz and above 2360 MHz; and not less than $70 + 10 \log (p)$ dB on all frequencies below 2300 MHz and between 2320-2345 MHz band;

(2) For mobile operations: By a factor not less than $43 + 10 \log (p)$ dB on all frequencies between 2300 and 2305 MHz, between 2320 and 2345 MHz, and above 2360 MHz; and not less than $70 + 10 \log (p)$ dB on all frequencies below 2300 MHz;

(3) For the purposes of this section, radiolocation shall be classified as either a fixed or mobile service, depending upon the application; and

(4) Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency bands of operation a smaller resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed, provided the measured energy is integrated to provide the total energy in a 1 MHz bandwidth.

(b) For WCS satellite DARS operations: The limits set forth in section 25.202(f) of this chapter apply.

(c) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close the edges, both upper and lower, of the license's bands of operation as the design permits.

(d) When an emission outside of the authorized bandwidth causes harmful interference, the Commission may, at its discretion, require greater attenuation than specified in this section.

§ 27.54 Frequency stability.

The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

§ 27.55 Field strength limits.

If geographic partitioning is employed, the predicted or measured median field strength at any location on the border of the WCS service area shall not exceed 47 dBuV/m unless the parties agree to a higher field strength.

§ 27.56 Antenna structures; air navigation safety.

A licensee that owns its antenna structures must not allow these antenna structures to become a hazard to air navigation. In general, antenna structure owners are responsible for registering antenna structures with the FCC if required by part 17 of this chapter, and for installing and maintaining any required marking and lighting. However, in the event of default of this responsibility by an antenna structure owner, the FCC permittee or licensee authorized to use an affected antenna structure will be held responsible by the FCC for ensuring that the antenna structure continues to meet the requirements of part 17 of this chapter. See section 17.6 of this chapter.

(a) Marking and lighting. Antenna structures must be marked, lighted and maintained in accordance with part 17 of this chapter and all applicable rules and requirements of the Federal Aviation Administration.

(b) Maintenance contracts. Antenna structure owners (or licensees and permittees, in the event of default by an antenna structure owner) may enter into contracts with other entities to monitor and carry out necessary maintenance of antenna structures. Antenna structure owners (or licensees and permittees, in the event of default by an antenna structure owner) that make such contractual arrangements continue to be responsible for the maintenance of antenna structures in regard to air navigation safety.

§ 27.57 International coordination.

WCS operations shall protect existing Canadian and Mexican operations in the 2305-2320 and 2345-2360 MHz bands. WCS operations along the US/Canadian and US/Mexican border areas shall be subject to coordination, as appropriate. In addition, satellite DARS operations on WCS spectrum shall be subject to international coordination procedures.

Subpart D -- Competitive Bidding Procedures for WCS

§ 27.201 WCS subject to competitive bidding.

Mutually exclusive initial applications to provide WCS service are subject to competitive bidding procedures. In addition to the rules set forth in this subpart, the following competitive bidding rules found in part 1, subpart Q of this chapter shall apply to WCS: 1.2101, 1.2102, 1.2103, 1.2104(a) through (f), (h) and (i), 1.2105(b) through (c), 1.2109 and 1.2111 of this chapter.

§ 27.202 Competitive bidding mechanisms.

In addition to the provisions of section 1.2104(a) through (f), (h) and (i), the following provisions will apply to WCS:

(a) Tie Bids. Where a tie bid occurs, the high bidder will be determined by the order in which the bids were received by the Commission.

(b) Maximum Bid Increments. The Commission may, by announcement before or during the auction, require maximum bid increments in dollar or percentage terms.

§ 27.203 Withdrawal, default and disqualification payments.

When the Commission conducts a simultaneous multiple round auction pursuant to section 27.202, the Commission will impose payments on bidders who withdraw high bids during the

course of an auction, or who default on payments due after an auction closes or who are disqualified.

(a) Bid withdrawal prior to close of auction. A bidder who withdraws a high bid during the course of an auction will be subject to a payment equal to the difference between the amount bid and the amount of the winning bid the next time the license is offered by the Commission. No withdrawal payment would be assessed if the subsequent winning bid exceeds the withdrawn bid. This payment amount will be deducted from any upfront payments or down payments that the withdrawing bidder has deposited with the Commission.

(b) Default or disqualification after close of auction. If a high bidder defaults or is disqualified after the close of such an auction, the defaulting bidder will be subject to the payment in paragraph (a) of this section plus an additional payment equal to 3 percent of the subsequent winning bid. If the subsequent winning bid exceeds the defaulting bidder's bid amount, the 3 percent payment will be calculated based on the defaulting bidder's bid amount. These amounts will be deducted from any upfront payments or down payments that the defaulting or disqualified bidder has deposited with the Commission.

(c) Erroneous bids. If at any point during an auction an erroneous bid is withdrawn in the same round in which it was submitted, the bid withdrawal payment will be the greater of:

(1) The minimum bid increment for that license and round; and

(2) The standard bid withdrawal payment, as defined in paragraph (a) of this section, calculated as if the bidder had made the minimum accepted bid. If an erroneous bid is withdrawn in the round immediately following the round in which it was submitted, and the auction is in Stage I or Stage II, the withdrawal payment will be the greater of:

(i) Two times the minimum bid increment during the round in which the erroneous bid was submitted, and

(ii) The standard withdrawal payment, as defined in paragraph (a) of this section, calculated as if the bidder had made a bid one bid increment above the minimum accepted bid. If an erroneous bid is withdrawn two or more rounds following the round in which it was submitted, the bidder will not be eligible for any reduction in the bid withdrawal payment as defined in paragraph (a) of this section. During Stage III of an auction, if an erroneous bid is not withdrawn during the round in which it was submitted, the bidder will not be eligible for any reduction in the bid withdrawal payment as defined in paragraph (a).

§ 27.204 Bidding application and certification procedures.

(a) Submission of Short-Form Application (FCC Form 175). In order to be eligible to bid, an applicant must timely submit, by means of electronic filing, a short-form application (FCC

Form 175). Unless otherwise provided by public notice, the Form 175 need not be accompanied by an upfront payment (see section 27.205).

(1) All Form 175s will be due on the date specified by public notice.

(2) The Form 175 must contain the following information:

(i) Identification of each license on which the applicant wishes to bid;

(ii) The applicant's name, if the applicant is an individual. If the applicant is a corporation, then the short-form application will require the name and address of the corporate office and the name and title of an officer or director. If the applicant is a partnership, then the application will require the name, citizenship and address of all partners, and, if a partner is not a natural person, then the name and title of a responsible person should be included as well. If the applicant is a trust, then the name and address of the trustee will be required. If the applicant is none of the above, then it must identify and describe itself and its principals or other responsible persons;

(iii) The identity of the person(s) authorized to make or withdraw a bid;

(iv) Certification that the applicant is legally, technically, financially and otherwise qualified pursuant to section 308(b) of the Communications Act of 1934, as amended. The Commission will accept applications certifying that a request for waiver or other relief from the requirements of section 310 is pending;

(v) Certification that the applicant is in compliance with the foreign ownership provisions of section 310 of the Communications Act of 1934, as amended;

(vi) Certification that the applicant is and will, during the pendency of its application(s), remain in compliance with any service-specific qualifications applicable to the licenses on which the applicant intends to bid including, but not limited to, financial qualifications. The Commission may require certification in certain services that the applicant will, following grant of a license, come into compliance with certain service-specific rules, including, but not limited to, ownership eligibility limitations;

(vii) An exhibit, certified as truthful under penalty of perjury, identifying all parties with whom the applicant has entered into partnerships, joint ventures, consortia or other agreements, arrangements or understandings of any kind relating to the licenses being auctioned, including any such agreements relating to the post-auction market structure.

(viii) Certification under penalty of perjury that it has not entered and will not enter into any explicit or implicit agreements, arrangements or understandings of any kind with any parties other than those identified pursuant to paragraph (a)(2)(viii) of this section regarding the amount of their bids, bidding strategies or the particular licenses on which they will or will not bid; and

(ix) Certification under penalty of perjury that it is not in default on any Commission licenses and that it is not delinquent on any extension of credit from any federal agency;

Note to paragraph (a): The Commission may also request applicants to submit additional information for informational purposes to aid in its preparation of required reports to Congress.

(b) **Modification and Amendment of Application.** Applicants will be permitted to amend their Form 175 applications to make minor amendments to correct minor errors or defects such as typographical errors. Applicants will also be permitted to amend FCC Form 175 to make changes to the information required by section 27.204(a) (such as ownership changes or changes in the identification of parties to bidding consortia), provided such changes do not result in a change in control of the applicant and do not involve another applicant (or parties in interest to an applicant) who has applied for licenses in any of the same geographic license areas as the applicant. Amendments which change control of the applicant will be considered major amendments. An FCC Form 175 which is amended by a major amendment will be considered to be newly filed and cannot be resubmitted after applicable filing deadlines. See also section 1.2105 of this chapter.

§ 27.205 Submission of upfront payments.

(a) The Commission may require applicants for licenses subject to competitive bidding to submit an upfront payment. In that event, the amount of the upfront payment and the procedures for submitting it will be set forth in a public notice. No interest will be paid on upfront payments.

(b) Upfront payments must be made by wire transfer.

(c) If the applicant does not submit at least the minimum upfront payment, it will be ineligible to bid, its application will be dismissed and any upfront payment it has made will be returned.

(d) The upfront payment(s) of a bidder will be credited toward any down payment required for licenses on which the bidder is the high bidder. Where the upfront payment amount exceeds the required deposit of a winning bidder, the Commission may refund the excess amount after determining that no bid withdrawal payments are owed by that bidder.

(e) In accordance with the provisions of paragraph (d) of this section, in the event a payment is assessed pursuant to section 27.203 for bid withdrawal or default, upfront payments or down payments on deposit with the Commission will be used to satisfy the bid withdrawal or default payment before being applied toward any additional payment obligations that the high bidder may have.